Long Fuse Warnings and Grid Collaboration

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Prepared by Western Region Digital Services Management Team

Considerations:

The Mission of the NWS places the preparation and follow-up to warnings as the highest priority of the NWS employees. This required practice will address the relationship between long fuse warnings (NPW, WSW, RFW, and Marine) and the grid collaboration between WFOs. At the present time, there is no direct relationship between grid collaboration and issuance of long fused warnings, other than warnings taking precedence as described in 10-503 Directive.

There are instances when a WFO has delayed issuing a long fuse warning in order to maintain grid consistency with their neighboring WFOs. If long fuse warnings are delayed because of grid collaboration issues, product lead-time will suffer. This is unacceptable. When communication breaks down and forecasters cannot agree, managers need to review the event. However, not all situations can easily be solved and the immediate needs of the NWS warning program dictate some structure within this decision environment. This policy attempts to address this issue. This policy does not apply to short fuse warnings.

Purpose:

To establish policy for the issuance of long fuse warnings (WSW, NPW, RFW, and Marine) and how WFO grid consistency and currency shall be maintained.

Policy:

1. When a WFO determines that a long fuse warning (WSW, NPW, RFW, Marine) is necessary for their CWA, and it falls along a border with another WFO:

   a. The initiating office(s) **shall** coordinate the warning and associated grids with appropriate neighboring WFOs and/or RFC(s) and/or HPC according to NWS established methods and extent/impact of the event.

   b. If a neighboring WFO(s) disagrees with the need for a long fuse warning (WSW, NPW, RFW, Marine) and the initiating WFO(s) continues to see the need for such a warning, the initiating WFO(s) **shall** issue the warning as soon as possible. The appropriate grid(s) associated with the warning **shall** be adjusted to meet or exceed the warning criteria and ISC grids sent. This does not mean that all the values within a grid element must meet or exceed warning criteria, but a majority or extent that warrants the issuance of such a warning. The WFO(s) that disagrees is not required to issue a warning, but **shall** bring associated grid points up to, or within established border consistency and/or just below WFO warning criteria to

provide a meteorologically reasonable transition. The warning office **shall** help with this transition along their borders where possible by tapering their grids provided it does not degrade the warning. The need to issue a warning by one WFO should not dictate the issuance of a warning by another WFO, especially considering not all border warning criteria match. Nor, should a warning be delayed because neighbors disagree.

2. Where break down in communications occurs between WFOs and one office is forced to make a grid change in objection and in accordance to stated above policy, MICs (HICs, if appropriate) from adjoining offices shall conduct a post event review and discuss the reasons for the unresolved differences and make a determination of actions to mitigate future such circumstances.

Special Case: Grids for Fire Weather Services in Shared Areas:

There are a number of small contiguous areas within Western Region, where WFO A has responsibility for public forecasts and warnings and WFO B has responsibility for fire weather forecasts and warnings. In these cases, when WFO B coordinates and issues a long fused Red Flag Warning which covers a shared area with WFO A, WFO A **shall** adjust their grids to meet or exceed the warning criteria. This does not mean that all grid values meet or exceed warning criteria, but a majority or to the extent that warrants the issuance of such a warning. As stated above, this applies to only long fused warnings (i.e. does not apply to short fused dry lightning outbreaks, short duration wind events, or Incident Meteorologist issued fire specific warnings).

Tools/Actions needed to carry out this policy:

No additional collaboration tools are required to carry out this policy.

There are various tools that can be used to determine if appropriate grids meet or exceed a warning criteria or values fall within a certain range. One of the best such tools is the "Edit Area and Query Dialog" option located on the GFE toolbar as a "**?**". The forecaster can quickly request a query of the appropriate grid to show values that are equal to, less than, greater than, or various combinations of these options.